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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,881	03/19/2004	Katsuhito Nishimura	723-1497	7151
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NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			HU, KANG	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/803,881	NISHIMURA, KATSUHITO
	Examiner Kang Hu	Art Unit 3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 April 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application
- 6) Other: _____.

DETAILED ACTION

1. This action is in response to the amendment filed 4/26/07. The examiner acknowledges that claims 1-7 have been amended, claims 8-26 have been added. Therefore, currently claims 1-26 are pending.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, “the moving speed of the virtual camera is variable and is determined based on said determined distance” as claimed in claims 15-26 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will

be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 15-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed limitation of “moving speed of the virtual camera varies based on said determined distance so that the moving speed is faster when said determined distance is farther and slower when said determined distance is closer” and “a moving speed of the virtual camera is variable and is determined based on said determined distance” is not described in the specification.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The independent claims 1, 6-8, 13 and 14 each recite “distance from said target

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location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened / made smaller irrespective of whether or not said player character has continued to move.” The rejection is maintained from previous office action for not clearly defining the bounds of the claim when read in light of the specification. The argument provided by the applicant is not persuasive in the regard that the amended claim appears to be consistent with the office action’s assumption that “ratio between the location of said virtual camera and the target location is shortened once the player character has stopped moving.” For example, as understood by the examiner, in the 0th frame, the target location is the same as the point-of-regard location. In the first frame before camera is moved, the target location and the point-of-regard location is changed by Δd , the first frame after camera is moved is shortened / made smaller by $\Delta d \times 80\%$, and the second frame is moved shortened / made smaller by $\Delta d \times 80\% \times 80\%$. Eventually after x number of frames, the point-of-regard location and the target location will be one of the same again, it does not allow any further “said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio to shorten irrespective of whether or not said player character has continued to move.”

Claims 2-5, 9-12 and 15-26 are rejected for their respective dependency upon claims 1, 6-8, 13 and 14.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizumoto (US 6,409,597 B1).

Re claim 1. Mizumoto discloses a game apparatus in which a virtual camera (col 1, lines 32-40) arranged in a three-dimensional game space (col 6, lines 1- 12) is made to follow a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space is displayed in a display (abstract; col 1, lines 1-17; col 8, lines 6-19) as a game image, comprising: an input-information obtaining programmed logic circuitry for obtaining input information input through a controller by a player at intervals of a predetermined number of frames in order to move said player character in said game space (col 1, lines 55-67; col 2, lines 1-15; col 7, lines 10-16 and 21-67); a location updating programmed logic circuitry for updating the location of said player character and said target location in said game space based on said input information; a virtual-camera-location updating means for updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has continued to move (Mizumoto discloses one of such example in col 8, lines 38-43 that the viewpoint is positioned to be the closest to the player's car by setting set point GP

at zero, and moving speed MS at 4) and a game-image generating means for generating the game image based on the updated location of said player character and location of said virtual camera (abstract; col 1, lines 55-67; col 2, lines 1-21; col 3, lines 25-40; col 8, lines 20-65; figures 5-10; col 13, lines 14-27).

Mizumoto further discloses:

Re claim 2: A game apparatus further comprising a virtual-camera setting programmed logic circuitry for arranging the virtual camera in a location determined in a predetermined manner toward a point of regard, and setting a direction of said virtual camera (col 8, lines 1-20) in such a manner as to face said point of regard (col 8, lines 25-55); wherein said reference location (col 9, lines 1-40) is a location of said point of regard, said virtual-camera-location updating programmed logic circuitry updates in order the location of said virtual camera by updating in order the location of said point of regard in such a manner that a distance from said target location to the location of said point of regard is shortened at a predetermined ratio irrespective of whether or not said player character has continued to move (abstract; col 1, lines 55-67; col 2, lines 1-21; col 3, lines 25-40; col 8, lines 20-65; col 13, lines 14-27; figures 5-10).

Re claim 3: A game apparatus further comprising a virtual-camera setting programmed logic circuitry for arranging the virtual camera in a location determined in a predetermined manner toward a point of regard (col 8, lines 25-55), and setting a direction of said virtual camera in such a manner as to face said point of regard; wherein said reference location is a location of said virtual camera, said target location is an initial location of said virtual camera that moves in

conjunction with said player character, said virtual-camera-location updating programmed logic circuitry updates in order the location of said virtual camera in such a manner that a distance from said target location to the location of said virtual camera is shortened at a predetermined ratio irrespective of whether or not said player character has continued to move (abstract; col 1, lines 55-67; col 2, lines 1-21; col 3, lines 25-40; col 8, lines 20-65; col 13, lines 14-27).

Re claim 4. A game apparatus according to claim 1, further comprising a distance determining programmed logic circuitry for setting a maximum distance that uses said target location as a reference, and determining whether or not the distance from the target location to said reference location is rendered longer than said maximum distance; and a forcedly updating programmed logic circuitry for forcedly updating said reference location to a location within the maximum distance that uses said target location as a reference when determined by said distance determining means that the distance is rendered longer than said maximum distance (abstract; col 1, lines 55-67; col 2, lines 1-21; col 3, lines 25-40; col 8, lines 20-65, Fig 5).

Re claim 5: said camera-location updating programmed logic circuitry includes a reference-location calculating programmed logic circuitry for calculating an updated reference location, and said distance determining programmed logic circuitry determines whether or not said updated reference location calculated by said reference-location calculating programmed logic circuitry is rendered longer than the maximum distance from said target location (col 7, lines 22-67; col 8, lines 1-67; col 9, lines 1-37).

Re claim 6. A storing medium that stores a control program of a virtual camera executed by a computer of a game apparatus (col 2, lines 5-15; col 6, lines 12-15, and 38-52) in which the virtual camera arranged in a three-dimensional game space (col 6, lines 1-12) is made to follow a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space is displayed in a display as a game image (abstract; col 3, lines 5-20, col 9, lines 40-67; col 10, lines 1-7), the control program of said virtual camera allows said computer to be functioned to provide: an input-information obtaining programmed logic circuitry for obtaining input information input through a controller by a player at intervals of a predetermined number of frames in order to move said player character in said game space (col 1, lines 62-67; col 2, lines 1-15; col 6, lines 30-39 and 62-67); a location updating programmed logic circuitry for updating the location of said player character and said target location in said game space based on said input information; a virtual-camera-location updating programmed logic circuitry for updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has continued to move; and a game-image generating programmed logic circuitry for generating the game image based on the updated location of said player character and location of said virtual camera (abstract; col 1, lines 55-67; col 2, lines 1-21; col 3, lines 25-40; col 8, lines 20-65; col 13, lines 14-27).

Re claim 7. A method of controlling a virtual camera in a game apparatus in which the virtual camera arranged in a three-dimensional game space (col 6, lines 1-12) is made to follow a target

location determined by a location of a player character in the game space so that a behavior of the player character in the game space is displayed in a display as a game image (col 9, lines 40-67; col 10, lines 1-7) comprising following steps of:

- (a) obtaining input information input through a controller by a player at intervals of the predetermined number of frames in order to move said player character in said game space (col 6, lines 30-39 and 62-67),
- (b) updating the location of said player character and said target location in said game space based on said input information (col 6, lines 30-39 and 62-67),
- (c) updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has continued to move (col 13, lines 14-27), and
- (d) generating the game image based on the updated location of said player character and location of said virtual camera (col 8, lines 6-19; col 9, lines 40-67; col 10, lines 62-67).

Re claim 8, a game apparatus in which a virtual camera arranged in a three-dimensional game space is made to follow a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space may be displayed as a game image, comprising: an input-information obtaining programmed logic circuitry for obtaining input information input through a controller by a player at intervals of a predetermined number of frames in order to move said player character in said game space; a location updating

programmed logic circuitry for updating the location of said player character and said target location in said game space based on said input information; a virtual-camera-location updating programmed logic circuitry for sequentially updating, on a frame by frame basis, a location of said virtual camera in such a manner that a distance between said target location and a reference location that is determined with respect to the location of said virtual camera is made smaller at a predetermined ratio per frame irrespective of whether or not said player character has continued to move; and a game-image generating programmed logic circuitry for generating the game image based on the updated location of said player character and location of said virtual camera (cols 7-8).

Re claim 9, a game apparatus according to claim 8, further comprising a virtual-camera setting programmed logic circuitry for arranging the virtual camera in a location determined in a predetermined manner toward a point of regard, and setting a direction of said virtual camera in such a manner as to face said point of regard; wherein said reference location is a location of said point of regard, said virtual-camera-location updating programmed logic circuitry sequentially updates, on a frame by frame basis, the location of said virtual camera by sequentially updating the location of said point of regard in such a manner that a distance between said target location and the location of said point of regard is made smaller at a predetermined ratio per frame irrespective of whether or not said player character has continued to move (cols 7-8).

Re claim 10, a game apparatus according to claim 8, further comprising a virtual-camera setting programmed logic circuitry for arranging the virtual camera in a location determined in a

predetermined manner toward a point of regard, and setting a direction of said virtual camera in such a manner as to face said point of regard; wherein said reference location is a location of said virtual camera, said target location is an initial location of said virtual camera that moves in conjunction with said player character, said virtual-camera-location updating programmed logic circuitry sequentially updates, on a frame by frame basis, the location of said virtual camera in such a manner that a distance between said target location and the location of said virtual camera is shortened at a predetermined ratio irrespective of whether or not said player character has continued to move (cols 7-8).

Re claim 11, a game apparatus according to claim 8, further comprising a distance determining programmed logic circuitry for setting a maximum distance that uses said target location as a reference, and determining whether or not the distance from the target location to said reference location is rendered longer than said maximum distance; and a forcedly updating programmed logic circuitry for forcedly updating said reference location to a location within the maximum distance that uses said target location as a reference when determined by said distance determining programmed logic circuitry that the distance is rendered longer than said maximum distance (cols 7-8).

Re claim 12, a game apparatus according to claim 11, wherein said camera-location updating programmed logic circuitry includes a reference-location calculating programmed logic circuitry for calculating an updated reference location, and said distance determining programmed logic circuitry determines whether or not said updated reference location calculated by said reference-

location calculating programmed logic circuitry is rendered longer than the maximum distance from said target location (cols 7-8).

Re claim 13, a storage medium that stores a control program of a virtual camera executed by a computer in which the virtual camera arranged in a three-dimensional game space follows a target location determined by a location of a player character in the game space so that a behavior of the player character in the game space may be displayed as a game image, the control program of said virtual camera allows execution by said computer to provide: an input-information obtaining programmed logic circuitry for obtaining input information input through a controller by a player at intervals of a predetermined number of frames in order to move said player character in said game space; a location updating programmed logic circuitry for updating the location of said player character and said target location in said game space based on said input information; a virtual-camera-location updating programmed logic circuitry for sequentially updating, on a frame by frame basis, a location of said virtual camera in such a manner that a distance from said target location to a reference location that is determined with respect to the location of said virtual camera is made smaller at a predetermined ratio per frame irrespective of whether or not said player character has continued to move; and a game-image generating programmed logic circuitry for generating the game image based on the updated location of said player character and location of said virtual camera (cols 7-8).

Re claim 14, a method of controlling a virtual camera in a three-dimensional game space so as to follow a target location determined by a location of a player character in the game space so that a

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behavior of the player character in the game space may be displayed in a display as a game image, the method comprising: (a) obtaining input information input through a controller by a player at intervals of a predetermined number of frames in order to move said player character in said game space, (b) updating the location of said player character and said target location in said game space based on said input information, (c) sequentially updating, on a frame by frame basis, a location of said virtual camera in such a manner that a distance from said target location to a reference location that is determined with respect to the location of said virtual camera is made smaller at a predetermined ratio per frame irrespective of whether or not said player character has continued to move, and (d) generating the game image based on the updated location of said player character and location of said virtual camera (cols 7-8).

Response to Arguments

9. Applicant's arguments filed April 26, 2007 have been fully considered but they are not persuasive.

In regards to the rejection under 35 U.S.C. 112, the argument has found to be not persuasive for the reasons stated above in the rejection.

In regards to the rejection under 35 U.S.C. 102, the applicant is claiming that Mizumoto fails to disclose "updating in order a location of said virtual camera in such a manner that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened irrespective of whether or not said player character has continued to move" as claimed in claim 1 and independent claims 6-7. The examiner respectfully disagrees with the applicant in this regard, the

claim is interpreted as the camera is shortened without regard to whether or not said player character has continued to move;” as cited by the examiner in cols 8, lines 20-65, one of many such example provided by Mizumoto states “if the position determination unit has determined that the player’s car has crashed, the viewpoint is positioned to be the closest to the player’s car by setting set point GP at zero, and moving speed MS at 4. This displays an impressive image of the player’s car having crashed, as shown in fig 6.” This example clearly shows that in a predetermined manner toward that a distance from said target location to a reference location determined in a predetermined manner toward the location of said virtual camera at a predetermined ratio is shortened when the player character has stopped moving.” In the same claim, the applicant alleges that Mizumoto does not disclose results in shortening the viewpoint at a predetermined ratio, the examiner views 4 points per frame clearly as a “predetermined ratio.” In the argument made by the applicant that the predetermined ratio is variable, not constant, no such claim limitation was claimed in claims 1-15, and claims 16-26 has not been seen to be supported by the specification. Accordingly, the examiner does not see a clear difference between “a predetermined ratio” as claimed and a constant rate of change in viewpoint as disclosed by Mizumoto. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

In regards to dependent claim 4 where a maximum distance is determined and “determining whether or not said updated reference location calculated by said reference-location calculating programmed logic circuitry is rendered longer than the maximum distance

from said target location” in claims 5. The examiner respectfully disagrees with the applicant’s viewpoint of setting 500 as the maximum point. As recited in one of the many examples in col 8, lines 20-65, “if the position determination unit has determined that the player’s car approaches an obstacle such as a tree or building, the viewpoint is positioned to quickly approach the player’s car by setting set point GP at 35, and moving speed MS at 10.” This clearly demonstrates that in this instance, the maximum distance set is at 35, and the viewpoint is positioned to quickly approach the player’s car when the maximum has exceeded 35.

Newly added claims 8-26 has been addressed above in the rejection.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kang Hu whose telephone number is (571)270-1344. The examiner can normally be reached on 8-5 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KH/
Kang Hu
July 22, 2007

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7/23/07